AMENDMENTS TO THE CLAIMS

A complete list of all the presently pending claims in the application is provided below, with suitable headings to show the status of each claim.

1.   (Currently Amended) A method for displaying a set of data with a virtually dissected anatomical structure, said method comprising:

creating a virtual dissection of the anatomical structure by mapping a first set of data of the anatomical structure to a second set of data of the anatomical structure;

computing a plurality of display index values corresponding to object shapes in said first set of data;

assigning display attributes to said display index values;

distance mapping from a reference axis said display index values from the first set of data to a third set of data; and

organizing said third set of data for display with the virtually dissected anatomical structure.

2.   (Original)   The method of claim 1, wherein the anatomical structure is a colon.

3.   (Original)   The method of claim 1, wherein the display attribute is color.

4.   (Previously presented) The method of claim 1, further comprising highlighting select said display index values according to user input.

5.   (Previously presented) The method of claim 4, wherein said highlighted select said display index values are shape data.

6.   (Previously presented) The method of claim 4, wherein said highlighted select said display index values are fluid data.

7.   (Previously presented) The method of claim 4, wherein said highlighted select said display index values are contrast enhanced fecal matter data.

8.   (Original)   The method of claim 1, wherein said first set of data is three-dimensional and said second and third sets of data are two-dimensional.

9.   (Currently Amended) A system for displaying a set of data with a virtually dissected anatomical structure, said system comprising:

a virtual dissection unit for creating a virtual dissection of the anatomical structure by mapping a first set of data to a second set of data, wherein the second set of data corresponds to the virtual dissection;

a computation unit for computing display index values corresponding to object shapes in said first set of data;

an assignment unit for assigning display attributes to said display index values;

a mapping unit for <u>distance</u> mapping <u>from a reference axis</u> said display index values from the first set of data to a third set of data;

an overlay unit for organizing said third set of data for display with the virtually dissected anatomical structure.

10.   (Original)   The system of claim 9, wherein the anatomical structure is the colon.

11.   (Original)   The system of claim 9, wherein the display attribute is color.

12.   (Previously presented) The system of claim 9, further comprising a highlighting unit for highlighting select said display index values according to user input.

13.   (Previously presented) The system of claim 12, wherein said highlighted select said display index values are shape data.

14.   (Original)   The system of claim 12, wherein said highlighted select display index values are fluid data.

15.   (Original)   The system of claim 12, wherein said highlighted select display index values are contrast enhanced fecal matter data.

16.   (Original)   The system of claim 9, wherein said first set of data is three-dimensional and said second and third sets of data are two-dimensional.

17.   (Currently Amended) A method for viewing a virtually dissected anatomical structure, said method comprising:

   instructing by a user the display of a virtual dissection of an anatomical structure;

   selecting by a user various characteristics of the anatomical structure for enhancement; and,

   observing by a user said selected characteristics and the virtual dissection.

18.   (Previously presented) The method of claim 17 further comprising displaying said virtual dissection and said select characteristics.

19.   (Original)   The method of claim 17, wherein said anatomical structure is a colon.

20.   (Original)   The method of claim 19, wherein said colon has characteristics comprising cup, rut, saddle, ridge, and cap.

21.   (Original)   The method of claim 17, wherein said selected characteristic for enhancement comprises fluid data.

22.   (Original)   The method of claim 17, wherein said selected characteristic for enhancement comprises contrast enhanced fecal matter data.

23.   (Original)   The method of claim 17, wherein said selected characteristic for enhancement comprises shape data.

24.   (Currently Amended) A computer readable medium encoded with a computer executable program for displaying a set of data on a virtually dissected anatomical structure, said computer executable program comprising:

creating a virtual dissection of the anatomical structure by mapping a first set of data of the anatomical structure to a second set of data of the anatomical structure;

computing a plurality of display index values corresponding to object shapes in said first set of data;

assigning display attributes to said display index values;

distance mapping from a reference axis said display index values from the first set of data to a third set of data;

organizing said third set of data for display with the virtually dissected anatomical

structure.

25. (Original) The computer executable program of claim 24, wherein the anatomical structure is a colon.

26. (Original) The computer executable program of claim 24, wherein the display attribute is color.

27. (Previously presented) The computer executable program of claim 24, further comprising highlighting select said display index values according to user input.

28. (Previously presented) The computer executable program of claim 27, wherein said highlighted select said display index values are shape data.

29. (Previously presented) The computer executable program of claim 27, wherein said highlighted select said display index values are fluid data.

30. (Previously presented) The computer executable program of claim 27, wherein said highlighted select said display index values are contrast enhanced fecal matter data.

31. (Original) The computer executable program of claim 24, wherein said first set of data is three-dimensional and said second and third sets of data are two-dimensional.